ABSTRACT

The invention provides a method and a composition for enhancing the dissolution and bioavailable properties of propofol (2, 6 diisopropyl phenol) for use as an intravenously administered anesthetic in mammals. The method produces a self-microemulsifiable emulsion base composition that is utilized in the production of a water-based microemulsion preparation. In a preferred two (2) component base composition, the base composition consists of: a surfactant, containing polyethylene glycol; and liquid propofol. The microemulsion is prepared by mixing the base composition with a carrier liquid, which results in the formation of a microemulsion containing concentrations of propofol of up to about 4% by weight of propofol to the volume of the microemulsion. In a four (4) component base composition, the base composition consists of: a surfactant, containing polyethylene glycol; liquid propofol; a water-immiscible solvent; and ethanol. The microemulsion is prepared by mixing the base composition with a carrier liquid, which results in the formation of a microemulsion containing concentrations of propofol of up to about 10% by weight of propofol to the volume of the microemulsion.